

Approval #

980010-U (Replaces 920013-U)

Safety & Buildings Division

201 West Washington Avenue P.O. Box 2689 Madison, WI 53701-2689

# Wisconsin Material Approval

Material

Aboveground Double Wall Horizontal and Vertical Tanks

Manufacturer

Brothers Manufacturing, Inc. P.O. Box 220 101 Brothers Drive Hermansville, MI 49847

### **SCOPE OF EVALUATION**

The aboveground double wall steel storage tanks, in horizontal and vertical configurations, manufactured by Brothers Manufacturing, Inc. have been evaluated in accordance with **s. ILHR 10.415(7)(b)** of the Wisconsin Administrative Flammable and Combustible Liquids Code.

# **DESCRIPTION AND USE**

The Brothers tank is an aboveground double wall steel storage tank. It is available with diameters between 36 and 144 inches with capacities up to 40,000 gallons. A built-in monitoring well is provided.

#### TESTS AND RESULTS

Underwriters Laboratories, Inc. has tested and listed the tanks in accordance with UL Standard 142. UL has also approved the saddle design.

# LIMITATIONS OF APPROVAL

The Brothers double wall tanks are approved for compliance with the secondary containment requirements of **s. 10.415** (7)(**b**) and may be used without a dike, except in the case of publicaccess waste oil collection. Tanks for public-access waste oil collection shall be provided with a dike in accordance with **s. ILHR 10.33**.

Tanks up to 10,000 gallons may be used for vehicle fueling in accordance with s. ILHR 10.415.

All tanks, regardless of capacity, shall have a minimum total wall thickness (heads and shells) of 7/16-inch. This is deemed sufficient to meet the projectile protection requirement of **s. ILHR 10.415(7)(b)**.

Double wall tanks with lesser wall thicknesses may be used inside a building without a dike subject to the requirements of **chapter ILHR 10** and **NFPA 30** and **31**.

Compartmentalized tanks shall be constructed with a double bulkhead in accordance with UL Standard 142. This interstitial space between compartments shall be monitored for leaks.

A spill container shall be provided at the fill opening in accordance with s. ILHR 10.415 (12)(a).

Separate vehicle collision protection shall be provided by a barrier that meets the design requirements specified in s. ILHR 10.415 (8)(a).

No attachments shall be made to the tank which violate or void the UL listing.

The horizontal tank shall be installed to allow full visual inspection of the secondary containment system.

The vertical tank shall have the bottom sandblasted and coated with a corrosion resistant paint such as an STI-P3 coating. The tank shall be placed on a concrete or similarly impervious pad with an area large enough to fully support the entire tank bottom. Vacuum tightness testing shall be conducted on the interstitial space by the owner on an annual basis after the tank is ten years old.

The interstitial space shall be monitored for leaks. The monitor must be capable of detecting a leak from anywhere in the inner tank.

The installer shall be certified by the department in accordance with **ch. Comm 5**.

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This approval will be valid through December 31, 2003, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The Wisconsin Material Approval Number must be provided when plans that include this product are submitted for review.

# **DISCLAIMER**

The department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement not specified in this document.

Reviewed by:	-		
Approval Date: _	By:		
		Duane D. Hubeler	
		Mechanical Code Consultant	
		Program Development Bureau	

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